FAA-H-8083-16, Instrument Procedures Handbook, 2014

Summary of Changes

This handbook supersedes FAA-H-8261-1A, Instrument Procedures Handbook dated 2007, and contains substantial changes, updates, and reorganization. It must be thoroughly reviewed.

Chapter 1

- This chapter was changed from "IFR Operations in the National Airspace System" in the previous edition to "Departure Procedures" in the current edition.
- The previous edition's chapter material contained overviews of how the IFR structure operates and some National Airspace System (NAS) components that were removed from this edition and deemed more appropriate for inclusion in the FAA-H-8083-15B, Instrument Flying Handbook.
- "Departure Procedures" addresses the consideration that must be given to obstacle avoidance and the resulting
 procedures utilized in an IFR departure. Much of the chapter's information is presented in the same logical
 order as in the previous edition, with updated graphics and examples, as well as additional pertinent information
 presented for consideration (e.g., Low, Close-In Obstacle avoidance).

Chapter 2

- This chapter was changed from "Takeoffs and Departures" in the previous edition to "En Route Operations" in the current edition.
- The current edition includes an added discussion on Route Sectors and Minimum Altitudes (e.g., Minimum Turning Altitude), as well as updated graphics and illustrations.

Chapter 3

- This chapter was changed from "En Route Operations" in the previous edition to "Arrivals" in the current edition.
- The current edition introduces an additional discussion on decent planning prior to reaching the Terminal Area with an increased focus on Area Navigation (RNAV) procedures and equipment.
- Illustrations and graphics throughout the chapter have been updated or improved.

Chapter 4

- This chapter was changed from "Arrivals" in the previous edition to "Approaches" in the current edition.
- Expanded discussion of Controlled Flight Into Terrain (CFIT) and Lack of Approach Control Terrain Advisories.
- Added information regarding Enhanced Flight Vision Systems (EFVS) and Instrument Approaches.
- Added LNAV and LNAV/VNAV and Circling Minimums discussion.

- Removed references to Heigh Above Threshold (HATh).
- Added verbiage cautioning flight crews to understand and adhere to 14 CFR 91.175 regarding operations below DA/DH and MDA with respect to runway and runway environment lighting.
- Added discussion noting any delay in decision to execute Missed Approach procedure increases risk of impacting objects penetrating visual obstacle clearance surface.
- Removed in-depth discussion of Microwave Landing System (MLS) approaches.
- Updated all chapter graphics and illustrations.

Chapter 5

- This chapter was changed from "Approaches" in the previous edition to "Improvement Plans" in the current edition.
- "Fleet Improvement" section removed.
- Added a thorough discussion of the NextGen System to include ADS-B, SWIM, Data and Network Communications systems, and a 'forecast' of NextGen planned improvements.
- Head-Up Display (HUD) and Synthetic and Enhanced Vision Systems (SVS/EVS) systems added.
- Discussion regarding Electronic Flight Bags (EFBs) was significantly edited, removing out-of-date information and replacing with a brief overview of emerging EFB technologies.
- Added information regarding Accessing Special Use Airspace.
- Improved and updated graphics.

Chapter 6

- This chapter was changed from "System Improvement Plans" in the previous edition to "Airborne Navigation Databases" in the current edition.
- This chapter was previously an appendix to the IPH and was updated with discussions of pertinent issues
 related to the development, standardization, content, concepts, limitations and utilization of Airborne
 Navigation Databases in use today and under development for future use in an ever-modernizing
 National Airspace System.

Chapter 7

- This chapter remains "Helicopter Instrument Procedures" in both editions.
- Updated illustrations and graphics pertinent to information discussed within the chapter.

Appendices

- Appendix A was changed from "Airborne Navigation Databases" in the previous edition (with that material moved to chapter 6), to "Emergency Procedures" in the current edition.
- Overview discussion of PIC responsibilities, some possible weather-related situations, aircraft system